Overview

The most prevalent mind disorder is substance abuse. It causes more health and social problems than any other disease. Fortunately it is treatable and has as good or better treatment successes than those of other diseases like cancer, heart problems, diabetes, or arthritis. Current issues in treatment include:

- the rapidly expanding use of medications for detoxification and withdrawal, and long-term abstinence;
- the use of sophisticated brain-imaging techniques to study brain function;
- the creation of more effective tools to diagnose addiction and match clients to the most effective treatment including tools to more accurately assess withdrawal symptoms;
- an understanding of the neurophysiology involved with drug cravings and the recovery process;
- an emphasis on evidence-based treatment practices;
- drug courts and coerced treatment;
- the lack of sufficient treatment resources
- continued controversy over abstinence-based and harm reduction modes of treatment.

Treatment leads to recovery in 50% to 80% of cases and saves at least $4 to $39 in actual costs for every $1 spent. Treatment results in crime reduction. Treatment can be customized for culture, gender, ethnic origin, and other specialized populations.

This chapter examines the principles and goals of treatment, the different treatment options available, selection of a specific treatment approach, initiating treatment, the continuum of treatment (detoxification, initial abstinence, long-term abstinence, and recovery), individual/group therapy, the involvement of the family, adjunctive treatment services, drug specific treatments, target populations (culturally consistent treatment), and the recent developments in treatment medications. Preventing relapse after treatment include addressing the challenges of cognitive deficits, cravings (endogenous/intrapersonal and environmental/interpersonal triggers) and post acute withdrawal symptoms (PAWS).

Behavioral addiction treatments are examined and require the same intensity and continuum of treatment as substance use disorders.

This chapter also covers motivational interviewing, stages of change model, treatment in prisons, intervention strategies, and obstacles to effective treatment.
Chapter 9 - TREATMENT

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Chapter 9 - TREATMENT

Extended Chapter Outline

I. INTRODUCTION (P. 9.2–9.6)

Treatment is effective. Scientifically based drug addiction treatments typically reduce drug abuse by 40% to 60%.

A. A DISEASE OF THE BRAIN (pp. 9.2–9.3)

Chemical dependency and addiction are more prevalent than other brain diseases. During the past year over 22 million Americans (8.7%) abused or were dependent on alcohol or an illicit drug, 29% were dependent on tobacco, and 2–6 percent had a gambling addiction. Chemical dependency is the #1 physical health problem in the U.S.

B. CURRENT ISSUES IN TREATMENT (pp. 9.3–9.6)

Eight aspects of chemical and behavioral dependency treatment dominate research, clinical practice, and discussion.

1. More medications are used to treat detoxification and withdrawal, lessen craving, substitute less damaging drugs, induce nutritional supplements, control depression, etc.
2. Brain imaging and other new diagnostic techniques, e.g., CAT, MRI, fMRI, PET, SPECT, and DTI, are now used to visualize the structural and physiological effects of addiction.
3. More-effective tools exist to diagnose addiction and better match clients to specific treatment interventions.
4. There is a deeper understanding of the neuroscience of relapse and recovery, e.g., new areas of the brain that correlate to the chances of relapsed (stay-stopped switch).
5. Evidence-based best practices are eclipsing practice-based treatments.
6. Research indicates coerced treatment (e.g., drug courts) is just as effective in promoting positive outcomes as voluntary treatment.
7. Treatment has been proven effective, but the decrease in treatment facilities shows a lack of treatment resources. For every $1 spent on treatment, up to $39 is saved, mostly in prison costs, lost time on the job, healthcare costs, and social services. The Mental Health Parity and Addiction Equity Act, of 2008 established substance use disorder as a medical condition and mandated funding for treatment, as of yet, the changes in the system are few.
8. Differing attitudes between abstinence-oriented recovery and harm reduction persist. Harm reduction includes, drug replacement therapy, needle exchange, decriminalization, and controlled drinking. Most treatment centers employ an abstinence-based philosophy that also incorporates many harm reduction techniques.
II. TREATMENT EFFECTIVENESS (PP. 9.6–9.8)

Treatment outcomes for drug and alcohol abuse result in long-term abstinence along with tremendous health, social, and spiritual benefits.

A. TREATMENT STUDIES (pp. 9.7–9.8)

1. California Drug and Alcohol Treatment Assessment Study (CALDATA)
   California realized savings of $7 for every $1 spent on treatment. Treatment was most effective when patients were treated for at least six to eight months. Group therapy was more effective than individual therapy.

2. Drug Abuse Treatment Outcome Study (DATOS)
   The use of all drugs after treatment was reduced 50% to 70%. Short- and long-term residential programs seemed to have the greatest effect.

3. Treatment Episode Data Sets (TEDS)
   This survey describes admissions to substance-abuse treatment facilities.

4. National Survey of Substance Abuse Treatment Services (N-SSATS)
   An annual survey of all drug treatment facilities in the United States, public and private.

5. Treatment Research Institute, University of Pennsylvania

B. TREATMENT & PRISONS (p. 9.8)

On December 31, 2005:

- 2,284,913 Americans were in federal, state, and local prisons (11% were women); 93,000 were in juvenile detention facilities.
- 5 million were on parole or probation.
- 57% of federal and 20% of state inmates were serving a sentence for a drug offense; 11.5% were arrested for a drug-abuse violation;
- 40% to 65% of arrestees tested positive for alcohol or drugs;
- treatment slots are available for only about 10% of those who have serious drug habits,
- drug-abuse treatment reduces recidivism when treatment is linked to community services,
- fewer than 17% of incarcerated offenders with drug problems received treatment while in prison.
III. PRINCIPLES & GOALS OF TREATMENT (PP. 9.8–9.11)

A. PRINCIPLES OF EFFECTIVE TREATMENT (pp. 9.8–9.9)
Principles of Drug Addiction Treatment lists 13 principles of effective treatment.

- Addiction is a complex but treatable disease that affects brain function and behavior.
- No single treatment is appropriate for all individuals.
- Treatment must be readily available.
- Effective treatment attends to all needs of an individual, not just drug use.
- An individual's treatment and services plan must be assessed continually.
- Remaining in treatment for enough time is critical for positive outcomes.

B. PRINCIPLES OF DRUG-ABUSE TREATMENT FOR CRIMINAL JUSTICE SYSTEM (CJS) POPULATIONS (pp. 9.9–9,10)

- Drug addiction is a brain disease that affects behavior.
- Treatment must last long enough to produce stable behavioral changes.
- Assessment is the first step in treatment.
- Services must be tailored to fit needs.
- Drug use during treatment must be carefully monitored with drug testing.

C. GOALS OF EFFECTIVE TREATMENT (pp. 9.10–9.11)
Treatment is a lifelong process for the addict.

1. Primary Goals
- Motivation toward abstinence.
- Creating a drug-free lifestyle.

2. Supporting Goals
- Enriching job or career functioning.
- Optimizing medical functioning.
- Optimizing psychiatric & emotional functioning.
- Addressing relevant spiritual issues.

IV. SELECTION OF A PROGRAM (PP. 9.11–9.15)
Most program selections are spontaneous, based on cost, familiarity, location, and convenience of access. Evidence-based assessment tools match addicts to an appropriate level of care.
COST OF TREATMENT

- Incarceration $20,000–30,000
- Probation $15,000–20,000
- Res. long-term treatment $6,800–15,000
- Res. short-term treatment $4,400–8,000
- Methadone maintenance $4,200
- Intensive outpatient $2,500
- Outpatient treatment $1,800
- Untreated addiction $30,000–150,000

A. DIAGNOSIS (pp. 9.11–9.12)
Diagnostic tools are used to help verify, support, or clarify the potential diagnosis of chemical addiction. The most common are:

- American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR);
- Selective Severity Assessment (SSA) evaluates 11 physiologic signs to confirm the severity of the addiction;
- National Council on Alcoholism Criteria for Diagnosis of Alcoholism (NCA CRIT) and its Modified Criteria (MODCRIT);
- Addiction Severity Index (ASI) (the most comprehensive and lengthy criteria)
- Michigan Alcoholism Screening Test (MAST);
- CAGE Questionnaire (the simplest assessment tool for problem drinking, consists of just four questions).

B. TREATMENT OPTIONS (pp. 9.12–9.15)
No treatment is universally effective for everyone. A wide range of options exists.

1. Types of Facilities

Medical model detoxification programs can be inpatient, residential, or outpatient.

Residential/inpatient treatment short-term (1 to 28 days)

Partial hospitalization and day treatment are outpatient medical model programs.

Intensive outpatient programs: Methadone maintenance and other replacement therapies are considered outpatient medical model programs.

Office-based medical detoxification and maintenance treatment for opiate abusers is provided by qualified private medical practitioners (O-BOAT).

Social model detoxification programs are nonmedical (no or minimal medical staff presence) and are either residential or outpatient.
Social model recovery programs (also called outpatient drug-free programs); includes outpatient programs.

Therapeutic communities (TCs) are long-term (1 to 3 years) self-contained residential programs that provide full rehabilitative and social services.

Halfway houses permit addicts to keep their jobs and outside contacts while participating in a residential treatment program.

Several religious movements and faith-based treatment initiatives also use halfway house or inpatient treatment programs.

Sober-living and transitional-living programs are for clients who have completed a long-term residential program.

Harm reduction programs, consist mainly of pharmacotherapy maintenance approaches.

2. Admissions
In 2008, 1.849 million people were treated in various programs and facilities. It is estimated that another 17.4 million hardcore alcoholics and 6.4 million need illicit-drug treatment but did not receive needed care.

68% of all clients were male, 60% were white, 38% were referred to treatment through the criminal justice system.

V. BEGINNING TREATMENT (PP. 9.15–9.19)
Recovery is a lifelong process because the brain cells have been permanently changed.

A. RECOGNITION & ACCEPTANCE (pp. 9.15–9.19)
This self-diagnosis often requires the addict to hit bottom or be the subject of an intervention. Addicts and alcoholics rarely accept the diagnosis of their addiction from others. Coerced treatment via criminal justice sanctions can actually help an addict realize that they have hit bottom.

1. Hitting Bottom
The earlier addiction is recognized, accepted, and treated, the more likely the individual will have good health and enjoy a rewarding life. Addicts need not hit bottom to accept that they have a chemical dependency problem and participate in treatment.

2. Denial
Overcoming denial is the first step in all treatment. Denial is a refusal to acknowledge the negative impact that drug use is having on a person’s life.

3. Breaking Through Denial
The addict is usually the last person to recognize and accept her or his addiction.
There are several ways to break through denial.

- Legal Intervention
- Workplace Intervention
- Physical Health Problems
- Pregnancy
- Mental Health Problems
- Financial Difficulties

**Admissions By Source Of Referral In The U.S. In 2009**

<table>
<thead>
<tr>
<th>Total admissions</th>
<th>1,849,549</th>
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<tr>
<td>Alcohol Only</td>
<td>437,204</td>
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<tr>
<td>Alcohol W/Other Drug</td>
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<tr>
<td>Heroin</td>
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<tr>
<td>Crack Cocaine</td>
<td>152,819</td>
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<tr>
<td>Marijuana</td>
<td>321,648</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>121,485</td>
</tr>
</tbody>
</table>

**4. Intervention**

Strategies have been developed to attack an addict’s denial. A formal intervention should be tried after informal interventions have failed. They should include:

- **Love.** An intervention should always start and end with an expression of love.
- **Facilitation.** An intervention specialist or a knowledgeable treatment professional should organize the intervention
- **Intervention Statements.** Each team member prepares a statement that they will personally present to the addicted person at the intervention.
- **Anticipated Defenses & Outcomes.** The facilitator prepares the team to deal with denial, rationalization, anger, and accusations.
- **Intervention.** Timing, location, and surprise are crucial components of the intervention.
- **Contingency.** Team members continue to meet after the intervention to process their experiences.

**VI. TREATMENT CONTINUUM (PP. 9.19–9.25)**

Recovery is gradual, and a client undergoes several changes regardless of which therapy is used: detoxification, initial abstinence, long-term abstinence (sobriety), and continuous recovery.

**A. DETOXIFICATION (pp. 9.19–9.21)**

It takes about a week to completely excrete a drug such as cocaine and perhaps another 4 weeks to 10 months until the body chemistry settles down.
Social or non–medically supervised programs require clients to go through a medical detoxification or be 72 hours clean and sober before admittance. The initial detoxification can be “white knuckle” or medically/chemically assisted detoxification, to minimize withdrawal symptoms. Assessment of the severity is a crucial first step to detoxification. Severe physical dependence on depressants can require hospitalization.

1. Medication Therapy for Detoxification
A variety of medications are used during the detoxification phase to ease the symptoms of withdrawal and minimize the initial drug cravings; e.g., clonidine (Catapres®), phenobarbital, methadone, buprenorphine naltrexone, psychiatric medications, bromocriptine, acomprosate, nicotine patches, and disulfiram (Antabuse®).

2. Psychosocial Therapy
Medical intervention alone is rarely effective during the detoxification phase. Intensive counseling and group work have proven to be effective in breaking down residual denial and engaging the client in the full recovery process.

B. INITIAL ABSTINENCE (p. 9.21)
Body chemistry must be allowed to regain balance. Depletion of neurotransmitters causes drug hunger, known as endogenous craving. Medical approaches include Antabuse® for alcoholism and naltrexone for opioids.

C. LONG-TERM ABSTINENCE (p. 9.21)
Continued participation in group, family, and 12-step programs is the key to maintaining long-term abstinence from all drugs.

D. RECOVERY (pp. 9.21–9.22)
Recovering addicts must restructure their lives and discover things that give them joy, pleasure and satisfaction resulting from natural highs instead of the artificial highs they came to seek through drugs. Continued participation in 12-step or other groups is the path down which most recovering addicts have found success.

E. RELAPSE PREVENTION (PP. 9.22–9.23)
A relapse must be aggressively processed by the client and the counselor so that the causes can be identified and strategies developed to avoid future slips and relapses.

1. Cognitive Deficits
About 30% to 80% of substance abusers suffer from mild to severe cognitive impairments. Patients often appear normal during the early phase of treatment but are actually experiencing an inability to fully understand and process the treatment curriculum. It may take weeks or months after
detoxification for reasoning to return to a point where the individual can begin to fully engage in treatment.

2. Post–Acute Withdrawal Symptoms (PAWS) & Cognitive Impairments

PAWS are a group of emotional and physical symptoms that appear after major withdrawal symptoms have abated. The syndrome can persist for 6 to 18 months or longer. Symptoms include sleep disturbances, memory problems, inability to think clearly, anxiety, and physical coordination difficulties.

3. Cravings: Endogenous (INTERNAL) Triggers and Environmental (EXTERNAL) Triggers

a. Endogenous Triggers (Internal or Intrapersonal Triggers) having the greatest impact are negative emotional and physical states or internally motivated attempts to regain control in order to use. Acronyms like HALT (hungry, angry, lonely, tired) remind addicts of these triggers.

Abuse of an addictive drug disrupts brain chemistry resulting in an allostasis (imbalance) and a depletion of certain neurotransmitters which reinforces drug craving. Counseling, education, support from a sponsor, stress-reduction therapies, and participation in 12-step meetings are common treatment strategies.

b. Environmental Triggers (External or Interpersonal) often precipitate drug cravings e.g., relationship conflicts, social pressures, lack of support systems, negative life events, sensory stimuli, and slippery people places, and things. Environmental triggers are manifested by true physiological responses to psychological triggers.

F. RELAPSE PREVENTION STRATEGIES (p. 9.24)

Relapse prevention has become the focus of almost every treatment program. Addicts must

- recognize their personal triggers
- develop behaviors to avoid external triggers
- have an automatic reflex strategy that will prevent them from responding to internal or external cues.

1. Cue Extinction

Dr. Anna Rose Childress’s Desensitization Program retrains brain cells to avoid reacting when confronted by environmental cues (cue extinction).

2. Psychosocial Support

Initial abstinence is the phase during which addicts start to put their lives back in order. Building a support system is vital.

3. Natural Highs

Humans can create virtually every sensation and feeling from natural life situations, (sports, art, dance, travel) that drugs create.
E. OUTCOME & FOLLOW-UP (pp. 9.24–9.25)
Client outcomes and follow-up evaluations are a major element in treatment program activities. All types of addiction treatment have demonstrated positive client outcomes.

VII. INDIVIDUAL VS. GROUP THERAPY (PP. 9.25–9.32)
Medical treatments are only effective when integrated with psychosocial therapies.

A. INDIVIDUAL THERAPY (p. 9.24–9.27)
This therapy deals with clients on a one-on-one basis to explore the reasons for their continued drug abuse and to identify needs with the aim of changing behavior.
Cognitive-behavioral therapy, reality therapy, aversion therapy, psychodynamic therapy, art therapy, motivational interviewing or enhancement, and social skills training are used. Individual treatment may continue over months, years.

1. Motivational Interviewing & Motivational Enhancement Therapy
One of the most common counseling techniques is motivational interviewing coupled with a stages-of-change model. The technique uses a nonconfrontational style to involve clients in their own recovery process and help them change ambivalence about drug use into motivation to make the changes that lead to recovery. Motivational interviewing strives to express empathy, roll with resistance, develop and recognize discrepancies, and support self-efficacy by empowering clients to choose their own options.
It guides clients through the stages of change:
  1. precontemplation
  2. contemplation
  3. determination (preparation)
  4. action
  5. maintenance

B. GROUP THERAPY (pp. 9.27–9.32)
A major focus of group therapy is encouraging clients to help each other break the isolation of addiction.

1. Facilitated Groups
Facilitated group therapy usually consists of six or more clients who meet with therapists or counselors on a daily, weekly, or monthly basis.

2. Peer Groups
In peer group therapy, therapists play a less active role in the group’s dynamics. They observe interaction and are available to process any conflicts or areas of need but do not direct the process.
AA is the most widespread recovery movement in history. This peer group concept is based on 12 steps of recovery. Groups meet without a professional therapist or facilitator, problems are addressed and solved through personal/spiritual change.

4. Spirituality & Recovery
Spiritual and faith-based treatment interventions have a long and positive tradition in the recovery community. There is a 60% to 80% correlation between religion or spirituality and better health.

5. The 12 Steps of Alcoholics Anonymous
The steps begin with “We admitted we were powerless over alcohol [cocaine, cigarettes, food, gambling] and that our lives had become unmanageable” and end with “Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics and to practice these principles in all our affairs.” The 12 steps can work for any addictive behavior.

6. Educational Groups
Trained counselors provide the education and often bring in other experts to promote individual lesson plans

7. Targeted Groups
Focus on specific populations of users, such as men, ethnic groups, etc.

8. Topic-Specific Groups
Participants focus on key issues that are a threat to their continued recovery, single moms, the death of a child, etc.

9. Ten Common Errors Made in Group Treatment by Beginning Counselors or Substance-Abuse Workers
1. Failure to have a realistic view of group treatment.
2. Self-disclosure issues, failure to drop the “mask” of professionalism.
3. Agency culture, personal style.
4. Failure to understand the stages of therapy.
5. Failure to recognize countertransference issues.
6-10. Etc., etc.

VIII. TREATMENT & THE FAMILY (PP. 9.32–9.35)
Addiction is considered a family disease because abuse of drugs and alcohol affect all members of an addict’s family.

A. GOALS OF FAMILY TREATMENT (p. 9.32)
• Acceptance by family members that addiction is a treatable disease, not a moral weakness.
• Establishing and maintaining a drug-free family system.
• Developing a system for family communication and interaction.
• Processing the family’s readjustment.
B. DIFFERENT FAMILY APPROACHES (pp. 9.32–9.33)
1. Family Systems Approach
The drug or drinking problem is seen as an integral part of the functioning of
the whole family.
2. Family Behavioral Approach
This approach provides specific interventions to support and reinforce those
behaviors that promote a drug-free family system.
3. Family Functioning Approach
   - Functional family systems
   - Neurotic or enmeshed family systems
   - Disintegrated family systems
   - Absent family systems
4. Social Network Approach
The family breaks their isolation and develops skills that help them support
the recovery effort.
5. TOUGHLOVE® Approach
The family learns to establish limits for their interaction with the addict.

C. OTHER BEHAVIORS (pp. 9.33–9.35)
1. Codependency
Codependents are mutually dependent on the addicts to fulfill some need of
their own. The chances of recovery are greatly reduced unless a codependent
is willing to understand their role and submit to treatment.
2. Enabling
There is a strong tendency to avoid confrontation about the addictive
behavior and a subconscious effort to actively perpetuate the addiction.
3. Children of Addicts & Adult Children of Addicts (ACoA)
Many children of addicts take on predictable maladaptive behavioral roles that
often continue into their adult personalities.
   - Model child
   - Problem child
   - Lost child
   - Mascot child or family clown
Although they may not abuse drugs, their behavior can be as dysfunctional as
the addict’s. ACoAs also
   - are isolated and afraid of people and authority figures;
   - are approval seekers;
   - are frightened by angry people and personal criticism;
   - become or marry alcoholics
IX. ADJUNCTIVE & COMPLEMENTARY TREATMENT SERVICES (PP. 9.35–9.37)

It is necessary to help identify these various needs and then case-manage addicts toward appropriate treatment or service providers. They include

- arts therapy
- hypnosis
- guided imagery
- eye movement desensitization relaxation
- virtual-reality graded exposure therapy
- acupuncture
- vitamin therapy
- herbal therapy
- homeopathy
- nootropic or smart drugs
- biofeedback
- dance therapy
- mindfulness meditation
- hatha yoga
- equine therapy
- aroma therapy
- sensory deprivation.

X. DRUG-SPECIFIC TREATMENT (PP. 9.37–9.54)

A. POLYDRUG ABUSE (p. 9.37)

Treatment programs must be aggressive in identifying the total drug profile of their clients. Many substance abusers also practice a behavioral addiction such as compulsive eating. Substance addiction must be addressed as chemical dependency rather than a drug-specific problem.

B. STIMULANTS (cocaine & amphetamine) (PP. 9.37–9.39)

Methamphetamine abusers are more likely to be male, white, gay or bisexual. A wide range of drug-induced psychiatric symptoms often accompanies stimulant abuse.

1. Detoxification & Initial Abstinence

The vast majority of stimulant abusers respond positively to traditional drug-counseling approaches, e.g., cognitive-behavioral therapies (CBT) and behavioral therapies, like the Matrix Model, along with 12-step-oriented individual counseling.

Many drugs are medically used to treat various symptoms of stimulant detoxification and initial abstinence: antidepressant agents, antipsychotic
medications, sedatives, nutritional approaches, naltrexone, and dopamine agonists to suppress withdrawal symptoms and initial craving.

2. Long-Term Abstinence
To counter endogenous craving, many medications are used to stimulate dopamine release. Environmentally triggered craving is particularly intense in stimulant addiction. Continued abstinence weakens the craving response.

C. TOBACCO (pp. 9.39–9.41)
The only guarantee of success involving tobacco is never to begin use. The failure rate for most therapies is extremely high. Pharmacological treatments are preferred.

1. Nicotine Replacement Treatment
Nicotine replacement systems include nicotine patches, nicotine gum, nicotine nasal spray, nicotine inhalers and nicotine lozenges.
These systems slowly reduce the blood plasma nicotine levels to the point where cessation will not trigger severe withdrawal. If relapse prevention, counseling, and self-help groups are not used in conjunction with nicotine replacement therapy, the chances of relapse are high.

2. Treating the Symptoms
It is necessary to reduce the anxiety, depression, and craving associated with nicotine withdrawal because those conditions trigger relapse. Only varenicline (Chantix®) and bupropion (Zyban®) are FDA approved to treat nicotine withdrawal and craving.

3. Treating the Behaviors
CBT, motivational enhancement therapy, brief therapy, one-on-one counseling, group therapy, educational approaches, aversion therapy, hypnotism, and acupuncture are used.

D. OPIOIDS (pp. 9.41–9.43)
Opioid addiction has the highest rate of relapse. This is partially because physical withdrawal from opioids is more severe than withdrawal from stimulants.

1. Detoxification
Methadone and buprenorphine are the FDA-approved medications for opioid detoxification. These drugs are substituted for heroin or the abused opioid and are gradually tapered to minimize withdrawal.

2. Initial Abstinence & Long-Term Abstinence
A long-lasting opioid antagonist, such as naltrexone (ReVia®), is used after detoxification and supported by individual counseling sessions, group sessions, or self-help groups such as Narcotics Anonymous. Behavioral therapies like CBT, contingency management, and psychodynamic psychotherapy and family therapy are also used.
3. Recovery
The key to recovery from heroin or other opioid addiction is learning a new lifestyle.

4. Other Opioid Treatment Modalities

Methadone. In 2005, 1,069 methadone maintenance clinics provided treatment for more than 200,000 heroin addicts. Methadone, a synthetic opiate, is less intense than heroin but is longer lasting so it delays heroin-like withdrawal symptoms for 36 to 48 hours.

LAAM will remain active in the body for up to three days. Because use was connected to severe heart arrhythmias, it is no longer available in the United States and is only used in research settings.

Buprenorphine, at low doses, is a powerful opioid, 50 times as powerful as heroin, but at doses above 8 to 16 mg, it blocks the opioid receptors. Subutex is used during the early stage of detoxification; Suboxone is used thereafter. Licensed physicians can treat patients with buprenorphine in their offices.

E. SEDATIVE-HYPNOTICS (BARBITURATES & BENZODIAZEPINES) (pp. 9.43–9.44)
The majority of tranquilizer and sedative abusers tend to be older, White (85% to 89%), and female (59% to 60%). Intensive medical assessment and medically managed treatment are necessary.

1. Detoxification
Substitution therapy (using a drug that is cross-tolerant with another drug) is needed to detoxify dependency on these substances. The initial detoxification from sedative-hypnotics requires intensive daily medical management.

2. Initial Abstinence
This requires participation in group, individual, and educational counseling. Switching addicts to nonbenzodiazepine alternatives, particularly SSRIs like Zoloft, is preferable. BuSpar (buspirone) can also be used.

3. Recovery
Continued participation in self-help groups; Benzodiazepine Anonymous, Pills Anonymous, and Narcotics Anonymous has been the most effective means of promoting abstinence and recovery.

F. ALCOHOL (pp. 9.44–9.46)
Alcohol alone was the primary substance of abuse for almost 21.5% of all treatment admissions in the United States in 2005.

1. Denial
Denial on the part of a compulsive drinker is the biggest hindrance to entering treatment.

2. Detoxification
Up to 10% of untreated alcohol withdrawal and up to 3% of medically treated episodes include severe, potentially life-threatening symptoms such as seizure
activity which requires medical management. Withdrawal and detoxification should include emotional support and basic physical care.

3. Initial Abstinence
Antabuse® (disulfiram) is initially used. In 1996, naltrexone (ReVia®) was approved for the treatment of alcohol addiction. Acamprosate (Campral®) has had modest treatment effects in lowering craving. After alcohol has been cleared from the client’s system, the clinician must evaluate the client for psychiatric problems.

4. Long-Term Abstinence & Recovery
Clients must begin healing the confusion, immaturity, and emotional scars that kept them drinking for so many years. Relapse is always possible. Recovery is a lifetime process.

G. PSYCHEDELICS (pp. 9.46–9.47)
The overwhelming majority of users in treatment are male, White, and under the age of 24. The clinician or intake counselor can make only a tentative diagnosis until the drug has had time to clear. Treatment is most often focused on the intoxication or mental disorder, family dynamics, and social consequences.

1. Bad Trips (acute anxiety reactions)
Psychedelics can lead to acute anxiety, paranoia, fear over loss of control, or feelings of grandeur leading to dangerous behaviors. The best treatment for someone on a bad trip is to talk him or her down.

The condition known as hallucinogen persisting perception disorder (HPPD) is the recurrence of some of the symptoms after use has ceased. Addiction is treated with traditional counseling, education, and self-help groups.

Treatment for Bad Trips ARRRT guidelines
- **A**cceptance
- **R**eduction of stimuli
- **R**eassurance.
- **R**est
- **T**alk-down

H. MARIJUANA (pp. 9.47–9.48)
There has been a steady increase in the number of people entering treatment for marijuana dependence. One reason is the wider availability at the street level of high THC marijuana.

Marijuana can cause a true addiction syndrome encompassing both physical and emotional dependence. The physical withdrawal symptoms, though uncomfortable, rarely require medical treatment. Their onset is often delayed for several days or weeks after cessation of use. Motivational enhancement therapy and the development of coping skills, along with intensive relapse prevention therapy, are effective psychosocial interventions.
I. INHALANTS (p. 9.48)
First, immediately remove the patient from exposure to the substance. Monitor the patient for potential adverse psychiatric conditions. The symptoms must be evaluated and treated. About two-thirds of inhalant abusers admitted for treatment reported use of other drugs, primarily alcohol and marijuana.

J. BEHAVIORAL ADDICTION TREATMENTS (pp. 9.48–9.52)
Behavioral addictions require the same intensity of intervention and treatment as substance-abuse disorders.

1. Compulsive Gambling
The proliferation of gambling facilities has contributed to the increase of problem and pathological gamblers and to the incidents of relapse. Most gamblers are reluctant to seek treatment.
- Withdrawal symptoms similar to those of alcoholism, e.g., restlessness, irritability, anger, headaches, diarrhea, etc. are common.
- Gamblers Anonymous, the most common treatment modality, parallels the 12-step program used by Alcoholics Anonymous.

One of the keys to treating compulsive gamblers is enabling them to overcome irrational thoughts (magical thinking) about their chances of winning. Gambling often coexists, replaces, or follows alcoholism, compulsive spending, and a few other disorders. Cognitive-behavioral approaches used to treat chemical dependencies and participation in GA are effective for gamblers.

2. Eating Disorders
Early intervention is key to effective treatment of all three eating disorders—anorexia, bulimia, and binge eating. Diagnose and treatment of any medical complications, exercise, a balanced diet, a change of false perceptions about one’s body image, and enhancement of self-esteem are all necessary along with participation in Overeaters Anonymous or other 12-step group.

Anorexia. Most severely ill anorexic patients must be hospitalized. It usually takes 10 to 12 weeks for full nutritional recovery. The complexities of anorexia require a team approach.

Bulimia. Clients with bulimia usually have more long-term health problems than those with anorexia, often necessitating continuing medical care. The multidisciplinary treatment includes an internist, a nutritionist, a psychotherapist, and a psychopharmacologist. Family and group therapies are extremely useful.

Binge-Eating Disorder (includes compulsive overeating) has both physiological and psychological causes. Therapy examines underlying traumas and uses behavioral therapy, pharmacological treatment with antidepressants, and occasionally, surgical intervention. Self-help groups, such as OA, OA-HOW, and GraySheeters Anonymous have been proven effective.
**a. Eating Disorders & Substance Abuse** There is a link between those with an eating disorder and substance abuse problems. Common personality characteristics observed in both groups consist of secretiveness, ritualistic behaviors, obsession, social isolation, cravings, and a high tendency to relapse.

**b. Pharmaceutical Treatments for Obesity.** Many stimulants used as diet aids have an addictive component, creating more problems than they solve. Many substances work initially, but lose their effectiveness through prolonged use.

3. **Sexual Addiction**

Because many sexual aberrations stem from childhood sexual experiences, treatment must to deal with childhood development in addition to the mechanics of the addiction. The treatment often includes behavior modification (e.g., aversion therapy), cognitive-behavioral therapy, group, family or couple therapy, psychodynamic psychotherapy, motivational interviewing, and medications.

**Sexaholics Anonymous.** The main issues addressed are the feelings of shame, guilt, anxiety, and depression that are associated with sexual addiction.

4. **Electronic Addictions (Internet, gaming, cell phone)**

Because these addictions are so new, treatment personnel and treatment facilities are rare. Asian countries such as South Korea and China have tens of thousands of Internet addicts that should be in treatment. The traditional abstinence model is often impractical so a harm reduction model is usually necessary. Locating the computer in a different room, never going online without someone in the room/house, creating an Internet user log, telling people about your problem, etc. are all tactics that could help an addict.

**XI. TARGET POPULATIONS (p. 9.54–9.63)**

Treatment that is tailored to specific groups based on gender, sexual orientation, age, ethnicity, and economic status is more effect than a "one size fits all" approach.

**A. MEN VS. WOMEN (p. 9.54)**

Female substance abusers progress to addiction more rapidly than men, die at a younger age, and are less likely to ask for and/or receive help.

Men are often external attributers, blaming negative life events outside their control for their addiction, women are more often internal attributers, blaming problems on themselves. Treatment approaches that are supportive rather than confrontational result in better outcomes for women.

The greatest barriers to women seeking addiction are an inability to admit the problem, a lack of emotional support, and inadequate child care while in treatment.
B. YOUTH (p. 9.55)
Early onset drug use is the single best predictor of a future drug problem. The brain develops slowly from back to front cortices and is not fully mature until age 25, so an adolescent is less able to control impulsive and compulsive drug use.

Teens overestimate the true risks of drug use but they sometimes take that risk because their perception of the potential benefits outweighs their exaggerated perception of the risks involved.

Treatment should be molded around goals that are achievable within a short period and rewarded or reinforced immediately. Young people are less willing to accept guidance or intervention from adults and are more willing to listen to their peers. Normal adult programs do not work with young people. Specific youth-directed programs must be provided.

C. OLDER AMERICANS (pp. 9.55–9.57)
Thirty-seven million Americans are 65 years or older. Most problems in this group result from the abuse of alcohol and/or prescription and OTC drugs. 80% of seniors treated for drug problems identified alcohol as their main drug. It is difficult for healthcare professionals to spot drug or alcohol abuse in this group.

1. Factors That Contribute to Elderly Drug Misuse and Abuse
   - Illness exposes the elderly to more prescription drugs.
   - Physical resiliency declines with age.
   - Health professionals are not adequately trained to spot drug abuse.
   - There are age-related physiological changes that exaggerate the effects and toxicity of alcohol and other drugs.
   - There is a lack of adequate social and support services for seniors

2. Treatment of the Elderly Alcohol or Drug Abuser
   At present, few treatment programs aimed specifically at older Americans with a substance-abuse problem exist. These individuals are most successful in therapy groups with people their own age although mixed groups will work. Withdrawal is more severe in the elderly, but detoxification can be managed safely.

D. ETHNIC GROUPS (p. 9.57–9.61)
One-third of the U.S. population is comprised of people of color. Treatment specifically targeted to ethnic and cultural groups promotes continued abstinence better than general treatment programs.

1. African American
   Non-Hispanic African Americans make up 20.9% of the admissions to publicly funded substance-abuse treatment facilities though they are only 12% of the population. Treatment intervention must address the following the facts:
• African Americans have a higher pain threshold, which leads to a greater tolerance for suffering and delays a call for help. This results in more-severe addiction and the development of other life problems.

• African-American women use crack at a greater rate than any other drug except alcohol. This leads to an alarming dissolution of supportive family structures;

• drugs are seen initially as an economic resource, not an economic drain;

• crime leads to chemical dependency rather than addiction leading to crime;

• there is a very strong sense of boundaries;

• it’s hard to determine if chemical dependency is a primary or secondary problem; drug users must understand that other issues can’t be tackled successfully without tackling recovery first;

• the conspiracy theory is widely believed;

• revelations are widespread in the African-American community; organized spirituality is fundamental to promoting recovery.

2. Hispanic

In 2010, the U.S. Census Bureau estimated that 47.8 million (15.5%) of the U.S. population was of Hispanic origin.

In 2008, 258,000 (13.7%) of all those in substance-abuse treatment in the United States were of Hispanic origin. There is cultural diversity and differences as well as the similarities. Programs must be flexible, have bilingual and bicultural staff, and be prepared to treat the whole family because family is so significant in Hispanic cultures. The core aspects of Hispanic cultures are dignidad, respeto, y carino—dignity, respect, and love.

3. Asian & Pacific Islander

Asians and Pacific Islanders represent a variety of cultures with these characteristics:

• distinct and separate ethnic groups and languages (e.g., Japanese, Filipino, Cambodian, Indian, and Samoan);

• a strong regard for family with enmeshed family systems;

• a high respect for education;

• slow to show emotion or be open about personal issues;

• different key issues such as immigration, acculturation, and intergenerational conflicts;

• greater responsiveness to credentialed professionals than to peer counselors and a preference for individual rather than group counseling;

• a greater reliance on themselves to handle their addiction rather than a higher power or external control;
• a sense of family shame which keeps the family enabling and rescuing the addict repeatedly rather than insisting he/she get into treatment;
• a lack of available programs.

The most commonly used drugs in API communities vary:
• Chinese—tobacco and alcohol;
• Japanese—alcohol, marijuana, tobacco, crack cocaine, and methamphetamine;
• Korean—alcohol (whiskey and rice wine) and crack cocaine.

4. American Indian
Most American Indians live in 27 states, over half live in Arizona. Overall 63.8% of American Indian/Alaskan Native treatment admissions were for alcohol compared with 40.3% for the general population.

Bicultural and bilingual treatment personnel greatly increase the chances of successful treatment. Clinicians who are brought in to a reservation from the outside have trouble understanding the traditions, so they rely more on standard psychosocial therapy, which is not as effective and breeds distrust.

E. OTHER GROUPS (pp. 9.61–9.63)
Regardless of the group (homeless, gay, mentally or physically challenged) substance abusers must be involved in a treatment program that relies on peer groups.

1. Physically Disabled
Counselors can over-focus on a person’s physical disability and miss signs and symptoms of relapse or focus too strongly on the person’s addiction and not take into account the extra stress caused by the disability. Physical disabilities often involve pain creating a potential for abuse of prescription medications.

2. Lesbian, Gay, Bisexual & Transgender (LGBT)
Various studies estimate that 20% to 35% of gay men and lesbians are heavy alcohol users (vs. 10% to 12% of heterosexuals). The social life of many in these groups takes place in bars or other places/events that promote drug and alcohol use. Of greater influence, and the roots of all addiction can be found in genetics tempered by childhood stresses such as social rejection or physical, emotional, or sexual abuse. Identifying the client’s “family” and involving them in treatment can be difficult.

XII. TREATMENT OBSTACLES (PP. 9.63–9.65)
Denial and lack of financial or treatment resources constitute the biggest obstacles to addiction treatment.

A. DEVELOPMENTAL ARREST & COGNITIVE IMPAIRMENTS (pp. 9.63–9.64)
The use of psychoactive drugs can delay users’ emotional development and keep them from learning how to deal with life’s problems. Damage to brain functioning often results in cognitive deficits, especially during the first several
months of abstinence and recovery. 30% to 80% of substance abusers' have mild to severe cognitive impairments. It is often necessary to modify existing treatment protocols to the cognitive abilities of the client. Difficult and/or abstract concepts should be presented later in treatment when cognitive processing has improved. Three to six months of continuous abstinence is associated with the return of many, but not all, cognitive abilities. Goal setting, planning, sustained attention, response inhibition, problem solving and decision-making skills need to be learned.

B. FOLLOW-THROUGH (MONITORING) (p. 9.64)
Early program dropout or lack of compliance to the treatment protocol is clear indication of poor treatment outcomes. Client confidentiality, vital to the addiction treatment process has also contributed to the problem of poor treatment compliance. More and more professional boards (medical, nursing, legal) mandate the release of confidentiality as a condition of retaining a license.

C. CONFLICTING GOALS (p. 9.64)
An individual addict’s treatment goal may conflict with a program’s goal. Program goals may conflict with society’s goals.
The problems of conflicting goals are best managed by the development of clear program objectives and goals, better assessment and matching of clients to programs.

C. TREATMENT RESOURCES (p. 9.64)
The biggest obstacle continues to be lack of treatment resources. For every 100 people put on waiting lists, 66% will never make it into treatment. Any delay in accessing treatment results in a loss of motivation.

XIII. MEDICAL INTERVENTION DEVELOPMENTS (PP. 9.65–9.69)
A. INTRODUCTION (p. 9.65)
Advances in the understanding of the neuropharmacology of addiction during the 1990s, (The Decade of the Mind) led to a flood of medications targeted to treat chemical dependencies.

B. MEDICATIONS APPROVED TO TREAT SUBSTANCE-USE DISORDERS vs. THOSE USED OFF-LABEL (p. 9.65–9.66)
1. For Alcohol Dependence
   Approved
   Disulfiram (Antabuse®) Aversive consequences (flushing, nausea, vomiting, dizziness, and rapid heartbeat) occur immediately, discouraging further use of alcohol in the recovering alcoholic.
   Naltrexone (ReVia®) disrupts activation of the reward/reinforcement pathway of the brain to curb craving.
   Acamprosate (Campral®) is thought to stabilize receptors to moderate the craving response.
Naltrexone injectable suspension (Vivitrol®) received FDA approval for treatment of alcohol craving in 2005.
Chlordiazepoxide (Librium) was approved for the treatment of acute alcoholism withdrawal symptoms.

Off-label
Clonidine (Catapres).

2. For Nicotine Addiction

Approved
Varenicline (Chantix®) blocks nicotine’s activation of the receptors, which slows the release of dopamine to decrease craving.
Bupropion or amfebutamone (Zyban® or Wellbutrin®) the first oral pills to treat nicotine craving.
Nicotine products, e.g., Nicorette® gum is available O-T-C for nicotine replacement therapy delivery systems, e.g., transdermal patches.

Off-label
Nortriptyline and clonidine

3. For Opiate/Opioid Addiction

Approved
Buprenorphine (Suboxone® and Subutex®) is used for opioid detoxification and replacement therapy. Physicians are granted DEA permission to administer this medication for opioid addiction in their office rather than having to be part of an approved treatment clinic (office-based opioid addiction treatment, or O-BOAT).
Naltrexone (ReVia® and Trexan®) was approved by the FDA in 1984 to treat opioid dependence. It is an opioid receptor antagonist that blocks the actions of all opioids.
Methadone is used for detoxification and replacement therapy of heroin addiction as a harm reduction strategy.

Off Label
Clonidine and lofexidine

4. For Stimulant Drug Addiction

Off-Label
Abuse of stimulant drugs disrupts the same brain neurotransmitters that are imbalanced in depression and thought disorders, so antidepressants (e.g., sertraline, trazodone, and imipramine) and neuroleptics (e.g. haloperidol, Risperdal®, and olanzapine) are frequently used to treat symptoms of stimulant withdrawal.
5. For Sedative-Hypnotic Dependence

Off-Label

Though no medications have been FDA approved specifically to treat this condition, many drugs approved to treat seizure disorders (e.g., phenobarbital, various benzodiazepines, phenytoin, carbamazepine, and gabapentin) are currently used effectively to treat sedative-hypnotic drug dependence.

C. MEDICAL STRATEGIES IN DEVELOPMENT TO TREAT SUBSTANCE USE DISORDERS (p. 9.66–9.67)

Medications being developed to treat various SUDs can be classified either by the targeted stage of recovery or by their effects on the CNS and rest of the body.

1. Rapid Opioid Detoxification

This sometimes-dangerous strategy uses various medications to manage opioid withdrawal symptoms in combination with naloxone or naltrexone, opioid antagonists that force the rapid onset of the abstinence syndrome. It is alleged to occur within six to eight hours. Opioid addicts are quickly able to return to their daily lives without prolonged withdrawal.

2. Replacement or Agonist Effects

Positive results from methadone maintenance have stimulated the search for other replacement or agonist therapies. Methylphenidate and pemoline for cocaine and stimulant dependence and SSRI antidepressants and GHB for alcohol and sedative-hypnotic addiction are being tried.

3. Antagonist (blocking) Medications or Vaccines

While taking these types of agents, addicts are unable to experience the effects of an abused drug should they have a slip.

4. Mixed Agonist-Antagonist

The agonist part of this approach prevents withdrawal, while the antagonist effects prevent craving by blocking any further drug use, e.g., butorphanol and buprenorphine in opioid addiction.

5. Anticraving & Anticued Craving

Medications that can curb endogenous or environmentally cued craving responses are dramatic developments in treatment, e.g.,

- baclofen, a nonopioid muscle relaxant, also exhibits alcohol anticraving effects;
- topiramate and other antiseizure medications appear to block craving for alcohol and other drugs;
- mecamylamine appears to block environmentally cued craving of cocaine;
- bupropion, approved for the treatment of nicotine craving.
6. Metabolism Modulation
Medications like disulfiram (Antabuse®) can alter the metabolism of an abused drug to render it ineffective or cause noxious reactions.

7. Restoration of Homeostasis
Medications and nutrients that restore brain chemical balances are theorized to restore homeostasis, mitigating the need for drug use.

8. Amino Acid Precursor Loading
This strategy administers protein supplements (e.g., tyrosine, taurine) to addicts in an effort to increase the brain’s production of its neurochemicals to restore homeostasis.

9. Modulation of Drug Effects & Antipriming
A recent development is the use of medications that can modulate or blunt the pleasure-reinforcing effects of addictive drugs.

   **Calcium channel-blocking** medications prevent calcium ions from entering brain cells, blocking the release of dopamine.

   **Sodium ion channel blockers**, e.g. riluzole, phenytoin, and lamotrigine interfere with neuron transmission by blocking the cells’ uptake of sodium and enhance the effects of GABA.

10. Drugs with Unknown Strategies
Psychedelic drugs like ibogaine and ketamine are effective in treating cocaine and opioid addiction even though the early use of ibogaine to treat opioid addiction resulted in some fatalities. Other drugs that are being studied are dextromethorphan to treat opioid addiction, cycloserine, an antibiotic, to decrease opioid abuse, topiramate to limit alcohol abuse, and many others.

11. Other Strategies

   **Patented medical protocols.** Prometa® employs FDA-approved medications (though not approved for addiction) in a rigid short-term protocol to abate drug hunger and promote recovery.

   **Packaged clinical protocols** to treat addiction are copyrighted and sold to treatment providers to help facilitate clinical interventions and promote better outcomes. An example of this is the Matrix Model for cocaine, methamphetamine, and other stimulant drug addictions.

D. THE NEW DRUG DEVELOPMENT PROCESS (p. 9.69)

   Step 1: Preclinical Research & Development
   Step 2: Clinical Trials
   Step 3: Permission to Market
Chapter 9 – TREATMENT

Classroom or Small Group Discussion Topics

1. Research has documented that for every dollar spent on treating addictions the cost savings to society is between $4 and $20. Given these facts why isn’t there more federal and state money appropriated for treatment programs?

2. Break the class into small groups (3 to 5 students) and ask them to discuss “what they would say or do in the following scenarios?” After each member of the group has had an opportunity to provide input, have each group report the range of responses participants had to item 2.a. and 2.b.
   a. You were given prescription painkillers by your dentist after surgery. One day later, the pills are missing from your medicine cabinet.
   b. Your roommate regularly drinks a six-pack on Fridays and Saturdays. You notice that he or she begins drinking a six-pack during the week on Mondays and Wednesdays.
   c. Imagine that you are the parent of a 16 year old and you found a marijuana joint in your child’s room. How would respond?
   d. Imagine that you are the parent of a 16 year old and your child came home with alcohol on his breath and staggering. How would respond?

3. What are the implications of the claim that “addiction is not cured only arrested” in terms of a substance abuser’s ability to accept long-term recovery?

4. What are the advantages and disadvantages of allowing a person to “hit bottom” before initiating treatment?

5. What are the scientific reasons to support the use of replacement therapy or drug-substitution therapies (methadone for heroin)? There is a point of view among some that the use of this type of drug-substitution avoids the core addiction problem and just perpetuates drug-using behaviors. What are your views on the opposition to using drug-substitution therapy?

6. Which drug do your students believe poses the greatest challenge for recovery? Why?
Chapter 9 - TREATMENT

Critical Thinking & Class Exercises

1. Discuss the differences between the diseases of addiction, diabetes, and cancer. Have the students debate whether they think addiction is truly a disease.

2. Ask two students to improvise in front of the class using various words or actions for the following scenarios. (One student develops denial statements; the other student counters the denial statements.)
   a. Your high-school age brother is going out more often during the week, coming home smelling of alcohol, and is absent more often from school because of illness caused by the drinking. In addition, his grades are declining.
   b. Your father came home drunk again and hit your sister because she didn’t do her homework. You talk to your mother but she says not to interfere.
   c. Your roommate comes in late and drunk during the week, wakes you up to talk, and twice has vomited on the floor.

3. Have a group of five or six students dramatize an intervention. One student acts as the intervention leader, one acts as the addict and the others take on roles of friends, financial advisors, family members, and coworkers.
   Role plan a family intervention for a parent - designate one student for each of the following roles: the other parent, the model child, the problem child, the lost child, and the mascot child or family clown.

4. Ask students to place the 12 steps of AA in order (Write them in random order on a board, slips of paper etc.) Ask them to discuss specifically how the concept of powerlessness could keep many from seeking recovery.

5. What specific cultural factors and practices should be taken into account for each of the following groups:
   - African Americans
   - Asian Americans
   - Hispanics
   - Native Americans
   - Women
   - Athletes
   - Healthcare professionals
   - Lesbian, bisexual, gay or transgendered